CS-610S+ Coin Sorter

Service Manual

（Version 1.0）

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Introduction

CS-610S+ is a coin sorter with counterfeit detection, it is suitable for counting and sorting all kinds of round coins and tokens, in the meantime it will reject the fake/foreign coins.

This manual is edited by professional maintenance people, the data, diagram and specification included in this manual is based on the latest product. Please read this manual carefully before maintenance. If you have any problem, please contact your local distributor.

Declaration

We hold the right to modify the contents of this manual without notice.

1. Specifications

General Information	Sortable coins	All kinds of round, metal coins or tokens
	Display	LCD display (24064)
	Hopper capacity:	600 pcs（for coins with diameter 15mmm）
	Sortable coin diameter	14mm~31mm
	Sortable coin thickness	≦4mm
Counting speed		Around 600pcs/min（for coins with diameter 15mm）
Consumption		60W
Power supply		AC（110-220）V±10%，50HZ
Storage temperature		-20℃～50℃
Operation temperature		0℃～40℃
Operation humidity		30-75%
Dimension		510x280x320mm
Weight		16KG
Channel		5+1 version, the first right pocket is reject pocket
Error rate		≤10^{-5}

2. Maintenance tool

1.Screwdriver	11.Oscillograph
2.¢3 Instrument Screwdriver	12.Multimeter
3.Cross screwdriver	13.Internal Thermal Iron(25W)
4.Spanner(M4)	14.Tweezers
5.Spanner(5,6)	15.Peeling Pliers
6.Box spanner(5,6)	16.Pliers
7.1/2 pound Hammer	17.Electric Blowers

8.Wooden Hammer	18.Alcohol
9.Brush	19.Oil pot
10.Pliers for Beveled Retaining Ring	20.Air bellow

3、Installation and operation

3.1 Installation

Open the package carton, and take out the machine, checking if the accessories are complete. If any accessory lacks, please contact distributor immediately. Put the machine on a flat table, trying to avoiding dust, vibration, direct sunlight and the source of heat.

Firstly please checking if the local voltage conforms to the machine required voltage. If not, please contact with distributor immediately. Connect the one end of power cable with the power port on machine back side. Plug another end of power cable power socket. The machine must be grounded properly.

3.2 Key panel

Key Function:

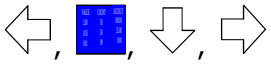
1） 0 ~ 9 : Numeric key for fast batch number settings

2） STOP/START: Start or Stop

3） SET: Set Menu or set some functions

4） ESC: Return to Manu or clear rejected coin records

5） CLR: Clear counting records or clear error codes

6）  : Select different Channels, or select different Menu Setting; can also control Batch function ON/OFF

7） MR: Read memory data

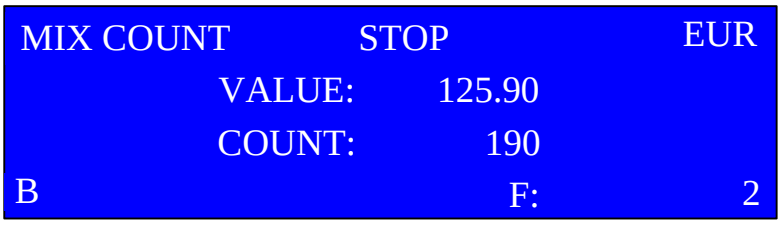
8） M+: Save Self-learning parameters

9） LIST: Check detailed counting list

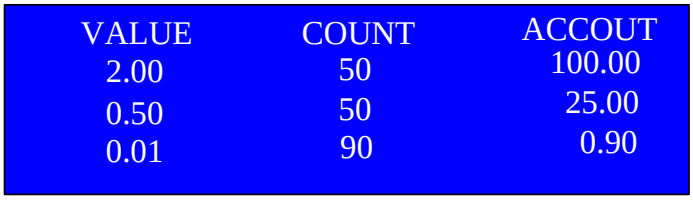
10） Print: Print sorting result and Self-learning parameters

Main Display Modes

1.Total Amount & Quantity Display Mode:



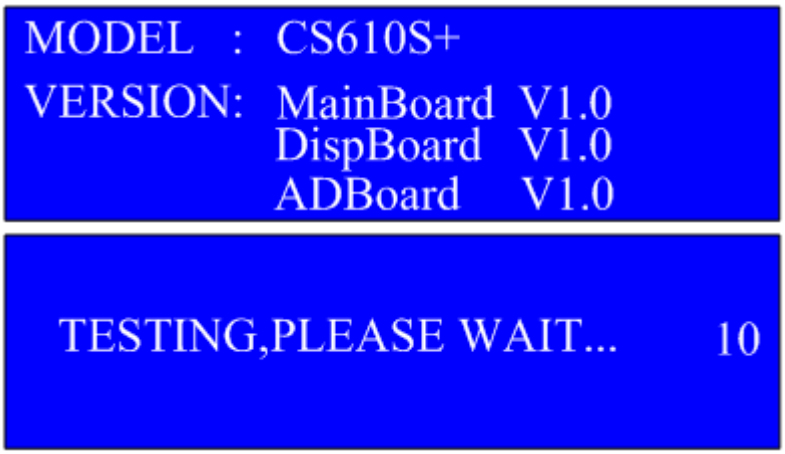
2.Separate Channel Amount & Quantity Display Mode:



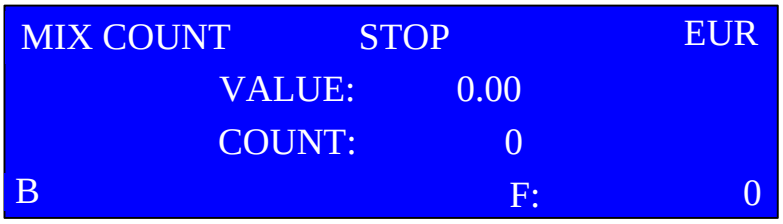
3.3 Operating Procedures

Plug the machine and turn on the power switch, it enters into self-test interface, shown as

following picture.



This self-test stage may needs about 10 seconds for machine to get warmed up. If the test result is OK, then machine will enter into normal working status shown as following interface:



MIX-COUNT means mix-counting mode

RUN/STOP is the sign showing machine's running or stop status.

B is the sign of Batch Function is ON.

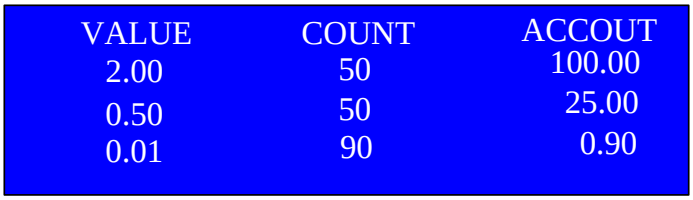
VALUE is for total Amount. **COUNT** is for total Quantity, **F** shows the quantity of foreign/fake coins.

Press START/STOP key, the machine will enter into Total Amount & Quantity Display Mode interface:

At the same time, Motor will begin to run to get the machine work. When coin sorting is finished,

it will display the sorting result of genuine and foreign coins on the above interface. The foreign coins will be rejected into the right-most Rejected Coin Drawer.

After the machine stops running, press LIST key to check Separate Channel Amount & Quantity Display Mode, shown as follows: (Press ⇧, ⇩ key to turn to choose different channel)



The left side group data shows coin denomination; the middle group data shows counted Qty for each denomination coin; the right side group data shows total counted amount for each denomination coin.

Data Clear:

·Under main modes interface, press CLR key to clear all counted data.

· Under main modes interface, press ESC key to clear rejected coin record.

Data Memory:

·Under main modes interface, press M+ key to save all counted data(excluding rejected coin Qty);

·Under self-learning mode, press M+ key to save coin parameters. (This function is only available for service engineer.)

Data Memory Read:

·Under main modes interface, press MR key to read stored data;

·Under self-learning mode, press MR key to initialize the system into default settings.

Function Settings:

Press SET key to enter into Menu interface, shown as follows:

Directly press ⇦, ⇧, ⇩, ⇨ four keys to choose target submenu and then press SET key to enter each into detailed operation interface:

(1) BATCH

After entering into this interface, the Channel No. will blink, this means you can select target channel by pressing ⇧ or ⇩ key, the channel number will be increased or decreased by 1. Once target channel selection is done, press SET key to make the channel number locked. At this time, it will enter into Batch No. setting status with the Batch number changed into white color. You could press 0~9 numeric key to set desired batch number. Pressing CLR key will clear the Batch number.

Notes: Before entering into this interface to do Batch No. setting, you need to make sure firstly Batch function is ON by checking if there is a B sign on the left bottom corner. You can control this batch function is ON/OFF by pressing ⇩ key under main operation menu.

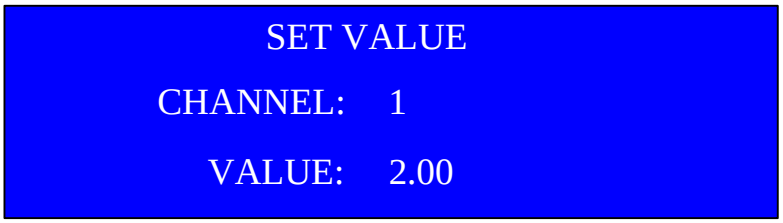
When one channel Batch No. setting is finished, you can come back to channel number selection

interface by pressing SET key and then repeat the above number setting way to set batch number for other target channels. After all settings are finished, press ESC key to quit from BATCH submenu to come back into main menu interface.

When the machine reaches set Batch number, the LCD display will show as follows:

For example, set batch number as 10 for Denomination 2.00 coin. When the machine counted 10th coin, the machine will stop running with blinking warning message" 2.00 BATCH OK". After you take out the coins, please press CLR key to clear the warning message.

(2) VALUE

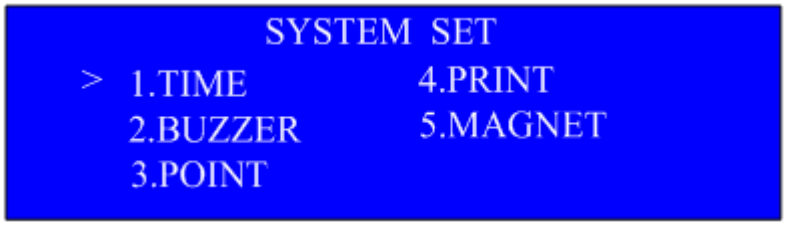


After entering into this interface, the Channel No. will blink, this means you can select target channel by pressing ⇧ or ⇩ key, the channel number will be increased or decreased. Once target channel selection is done, press SET key to make the channel number locked. At this time, it will enter into value number setting status with the value number changed to be white color. You can press 0~9 numeric key to set value. Press CLR key to clear the Batch number.

When one channel Value No. setting is finished, you can come back to channel number selection interface by pressing SET key and then repeat the above number setting way to set value

number for other target channels. After all settings are finished, press ESC key to quit from VALUE submenu to come back into main menu interface.

(3) SYSTEM



Firstly, it will enter into SYSTEM SET submenu, press ⇧ or ⇩ key to make the cursor up and down. And then press SET key to enter different setting interface.

a) **TIME:**

Under this interface, if you need to update date and time, please firstly press SET key to make the cursor blinking and then by press ⇨ key to make the cursor moving. Directly press 0~9 numeric key to set your desired date and time. Press CLR key to clear data. After all settings are finished, press ESC key to return to main menu interface.

b) **BUZZER:**

Under this interface, please press ⇧ or ⇩ key to turn ON/OFF this function. After setting, press ESC key to return to main menu interface.

c) **POINT**

Under this interface, please press ⇧ or ⇩ key to turn ON/OFF this function. After setting, press ESC key to return to main menu interface.

d) **PRINT**:

Under this interface, please press ⇧ or ⇩ key to choose PRINT 0 or set BAUD rate. Press SET key to choose either one, and then press ⇧ or ⇩ key to turn ON/OFF the function. After setting, press ESC key to return to main menu interface.

e) **MAGNET**:

Under this interface, please press ⇧ or key, You can choose solenoid kick coin time settings, after select this option, press SET key to set solenoid activation time(suggested range is 3~9ms). By press or ⇩ key, the time will be increased or decreased. After setting, press ESC key to return to main menu interface.

(4) TOTAL

This interface shows a memory record of all counted coin quantity. You can press ESC key to quit from this TOTAL submenu to come back into main menu interface.

(5) **TEST**

This submenu is for production adjustments purpose only. It is not available for users.

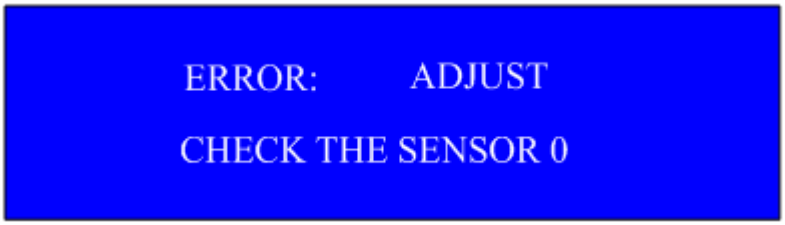
(6) **LEARN**

This submenu is for coin self-learning parameter tests and adjustments. It is not available for users.

4、Error Codes

During the self-test and running, sometimes the machine may display the following error codes.

（1）ERROR ADJUST

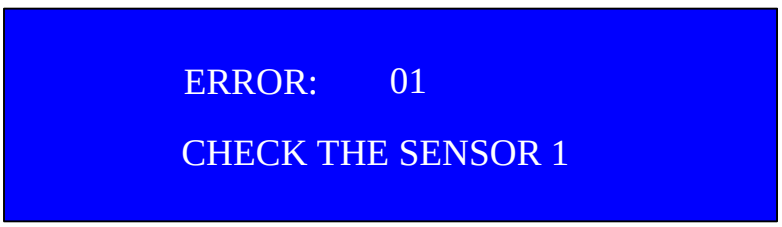


When it shows ERROR ADJUST, it means the alloy sensor signal is abnormal and the self-test can not be conducted normally, bellow is the solution:

1） Enter into the TEST interface and check if the first 3 groups of parameter show #OK, if not, please check the attached circuit adjusting instruction. If the parameter shown on the display has more than 10 difference with the standard TEST value, then you need to adjust the AD board to adjust the TEST value, please refer to the detailed steps on the instruction.

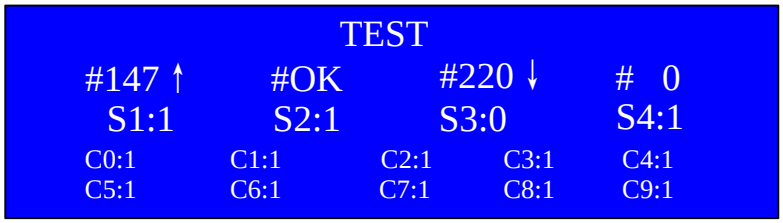
2）If the value difference is less than 10, please check if the alloy sensor is blocked by some foreign items.

(2)ERROR 01



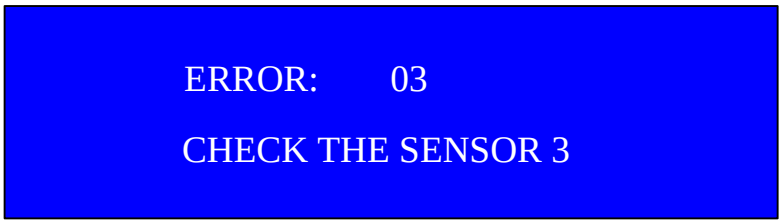
When it shows ERROR 01, it means the IR transistor was blocked and you need to check the IR transistor, including the connecting cable. After the problem is solved, please press CLR key to enter into main interface.

ERROR 02



· When it shows ERROR 02, it means the 2nd starting electromagnet is covered by something, and you need to check this electromagnet, including the connecting cable. After the problem is solved, please press CLR key to enter into main interface

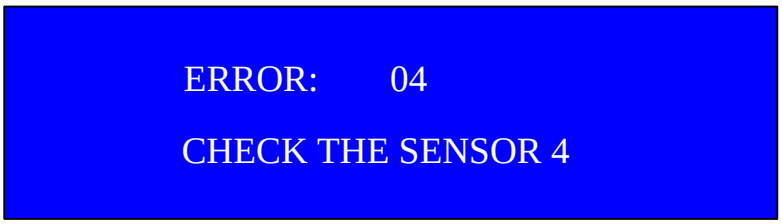
(3)ERROR 03



· When it shows ERROR O3, it means the starting sensor for 3rd Electromagnet is blocked, and you need to check the 3rd Electromagnet, including the connecting cable, after the problem is solved, please press CLR key to enter into main interface

The ERROR 02 and ERROR 03 Electromagnet are for machine with special circuit, the standard machine does not have.

(4)ERROR 04



When it shows ERROR 04, it means the coin outlet plate is conductive, so please check:

1）If there is a coin or other metal items stuck between the coin outlet plate and rail

2）If the connecting cable of the coin outlet plate is plugged in right place, you can refer to below picture .

3）If you can not discover the short-circuit problem by eyes, please use a multi meter, one end connected with the coin outlet plate and one end connected with the rail, please check the coin outlet plate one by one . If you find out the coin outlet plate with problem , please check if the insulation washer and insulation grain are broken and need to be replaced. After the problem is solved, please press CLR key to return to main interface.

Notes: If some foreign items block the rail, the coins will not be counted, then the counted quantity will be different with the actual quantity. So before counting, please use the pre-sorting tray provided with the **machine** to sort out the foreign items mixed with the coins.

5. About printer

（Note: this machine can be connected with external printer, the printer used by our company is called SPRT-T thermal printer.The printer is connected with machine through RS232 interface by a communication cable provided with the printer

A. Operation

Turn on the power supply, press the MENU key to choose the connecting mode. At this moment, the indicator

will light, it means the printer is already connected and can receive data, so now it can print the data. If the indicator does not light, it means the printer can not receive data. When the printer is not connected, you can press LF

Key to load the printing paper and press it again to stop loading. During printing, you can press MENU key to stop printing.

Installation of printing paper

Push the front cover and take out the shaft of the paper roll, after install the paper roller and return to normal position.

Press the MENU key to turn off the indicator and press LF key to load the paper

Press the MENU key to turn on the indicator and start printing.

6.Daily Maintenance

You can use soft cloth and cleanser to clean the dirt on the housing. Water can't be used to clean the machine, make sure not to let water come into the machine.

If the machine is deposited without using for long time, please turn off the power and close the plastic dustproof cover.

Do not put any heavy thing on the machine.

The machine should stay away from any heat source, otherwise the plastic parts of the machine will be subject to transmutation and the machine may not work properly.

The power cord and AV cable should match the machine.

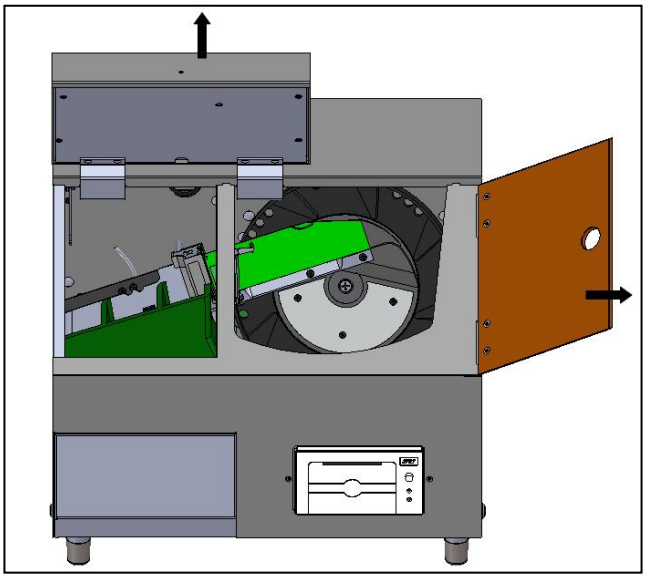
Pull out the power cord before moving the machine.

Avoid direct exposure to sunshine.

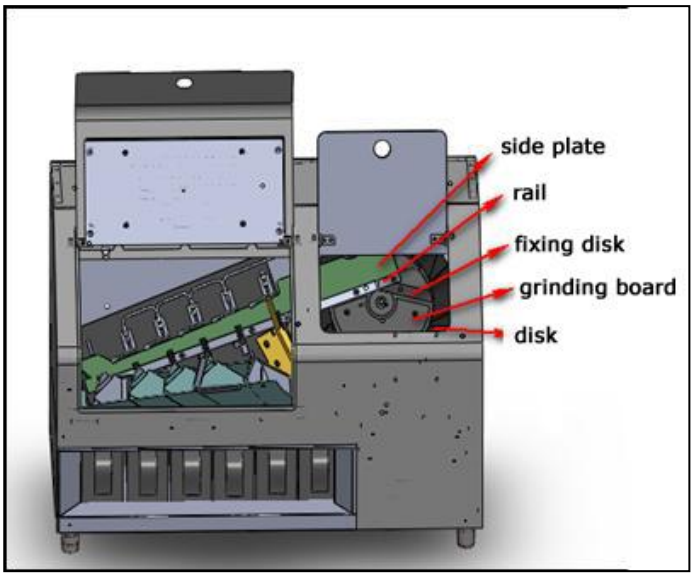
Do not put your head, hand, clothes or tools into the machine to avoid any injuries.

Do not open the cover when the machine is working.

- Please clean the inner parts of the machine regularly(we suggest that when the machine counted 5000pcs coins, you should clean the rail, side board, disk and alloy sensor)



Picture 6-1



Picture 6-2

1) Please refer to picture 6-1, open the front cover and visible window, turn off the machine and disconnect the power cable

2) Please use the absolute alcohol and clean cloth to clean the rail, side board, fixing disk, grinding board and alloy sensor, refer to picture 6-2

3) Rotate the disk with hand, and clean the disk with absolute alcohol and clean cloth

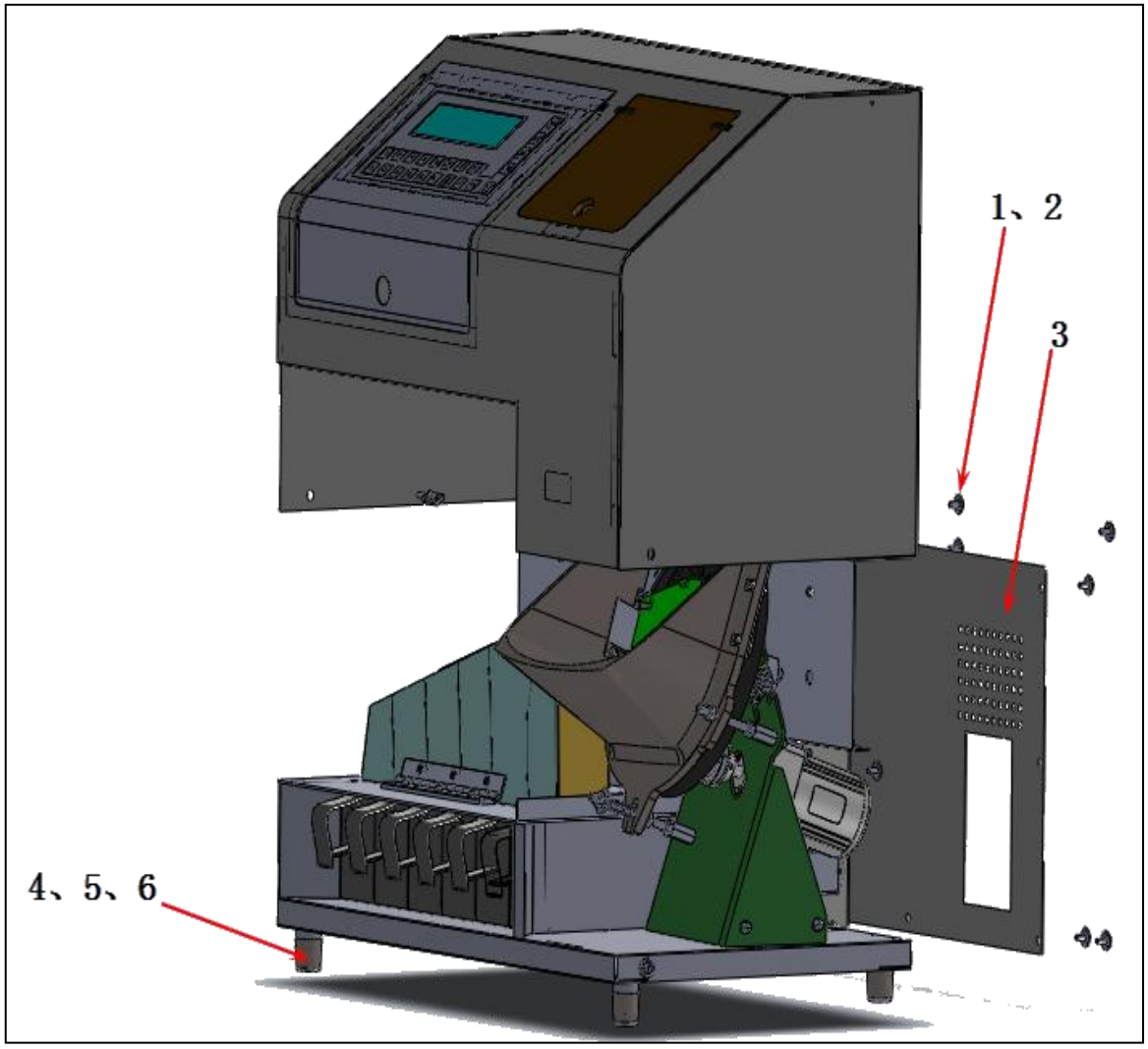
4) Use the Air bellow to clean the dust, metal scraps and foreign items on alloy sensor and side board.

5) After finish above steps, put down the visible window and front cover.

7. Diagram

【NOTES】: Before you disassemble the machine, please turn off the machine and unplug the power plug. Please do not operate the machine with electricity on.

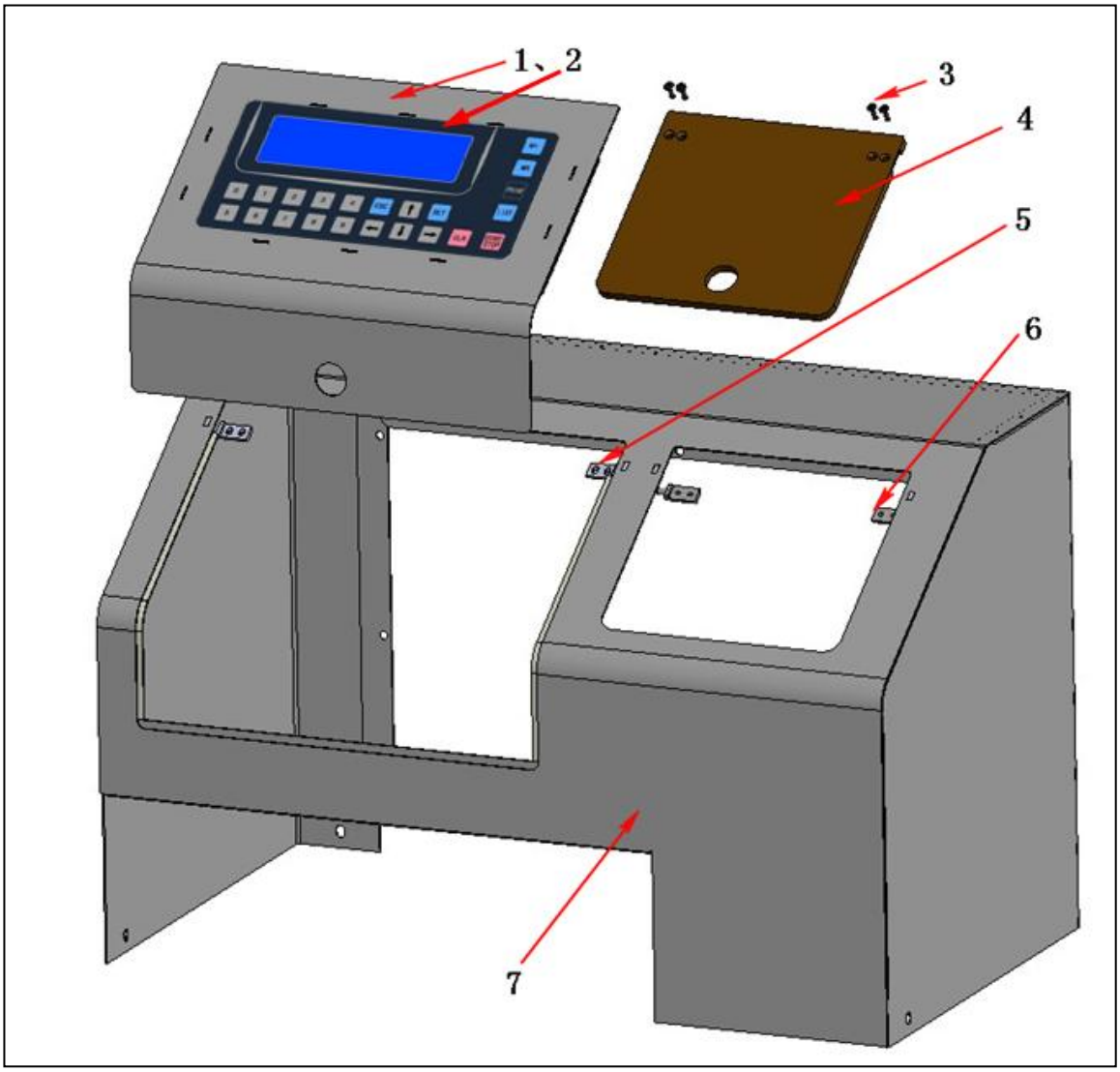
Diagram 1



Part List of Diagram 1

Item	Part No.	Description	Qty.	Remark
1	12010348	bolt M4*10	15	
2	12010714	washer Φ4	15	
3	11021179	Back cover	1	
4	11070922	Plastic foot washer	4	
5	11070866	Plastic foot	4	
6	11050310	block up pad	2	

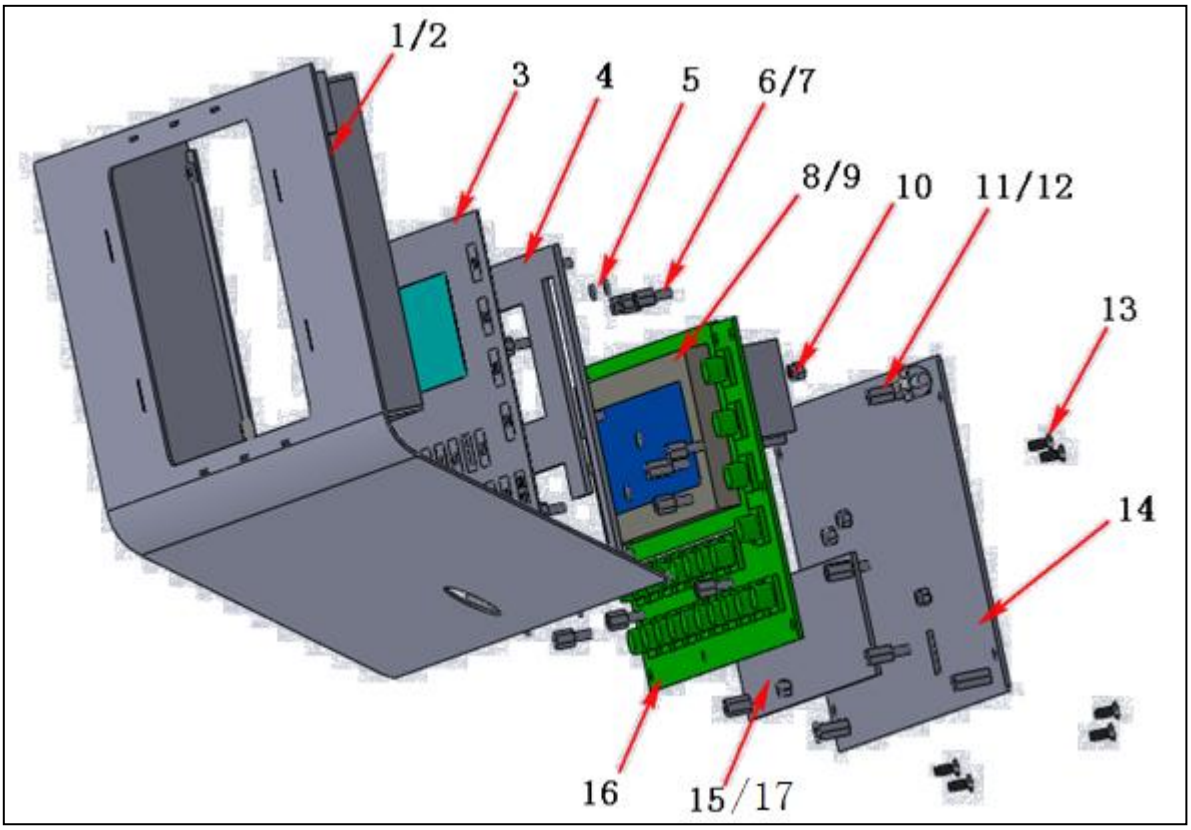
Diagram 2



Part List of Diagram 2

Item	Part No.	Description	Qty.	Remark
1	11021180	Front cover	1	
2	11081143	Key panel	1	
3	12010338	bolt M3*6	4	
4	11012050	Visible window	1	
5	11012004	Front cover shaft	1	
6	11012012	Visible window shaft	1	
7	11021201	Housing cover	1	

Diagram 3

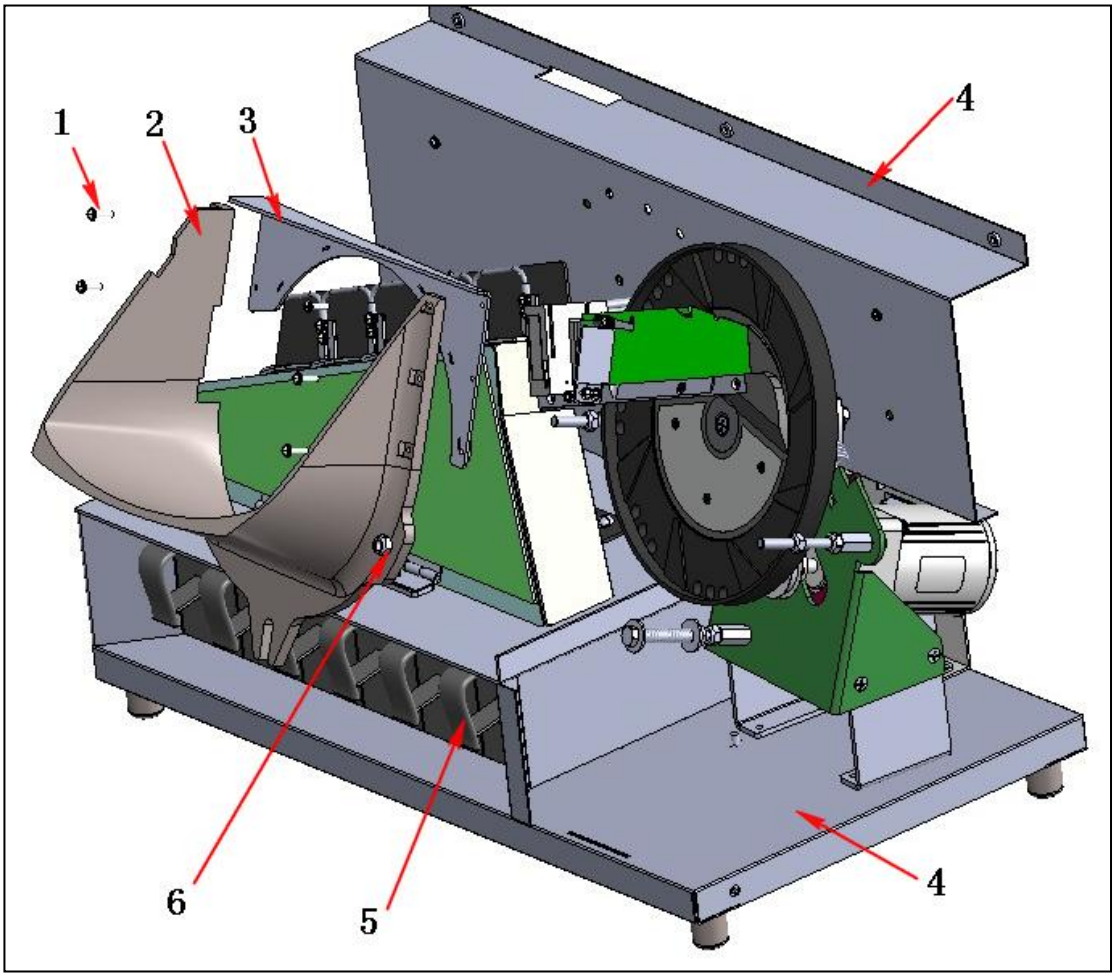


Part List of Diagram 3

Item	Part No.	Description	Qty.	Remark
1	11021189	Front cover（CS-610S+）	1	
2	41040134	earthing cable 400mm	1	
3	11081143	Key panel	1	
4	11021230	panel installation board	1	
5	12010701	spring washer ¢3	22	
6	12014226	hexagonal bolt M3*6	9	
7	12014228	hexagonal bolt M3*8	7	

8	51010101	LCD screen assembly	1	
9	41010299	cable 299	1	
10	12010601	nut M3	9	
11	12014224	hexagonal stud nut M3*8	1	
12	12030918	hexagonal bolt M3*18	3	
13	12010338	bolt M3*6	8	
14	11021229	back cover of the key panel frame	1	
15	11081144	display board	1	
16	11081145	KDC-V00 Key panel assembly	1	
17	41040516	7pin cable（CS-610S+）	1	

Diagram 4

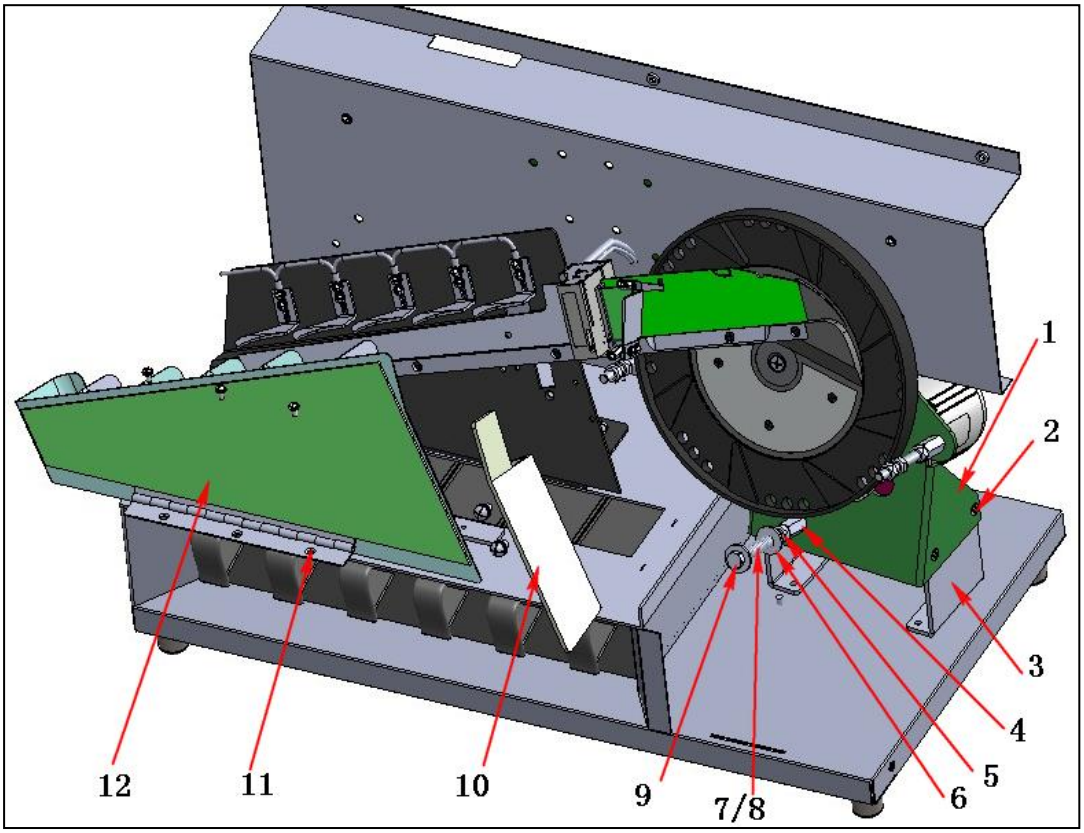


Part List of Diagram 4

Item	Part No.	Description	Qty.	Remark
1	12010163	composed bolt M3*14	5	
2	11073001	Storing hopper	1	

3	11021003	Blocking plate assembly	1	
4	11021202	Rack welding part	1	
5	11073002	Plastic holder	6	
6	12010622	nut M6	1	

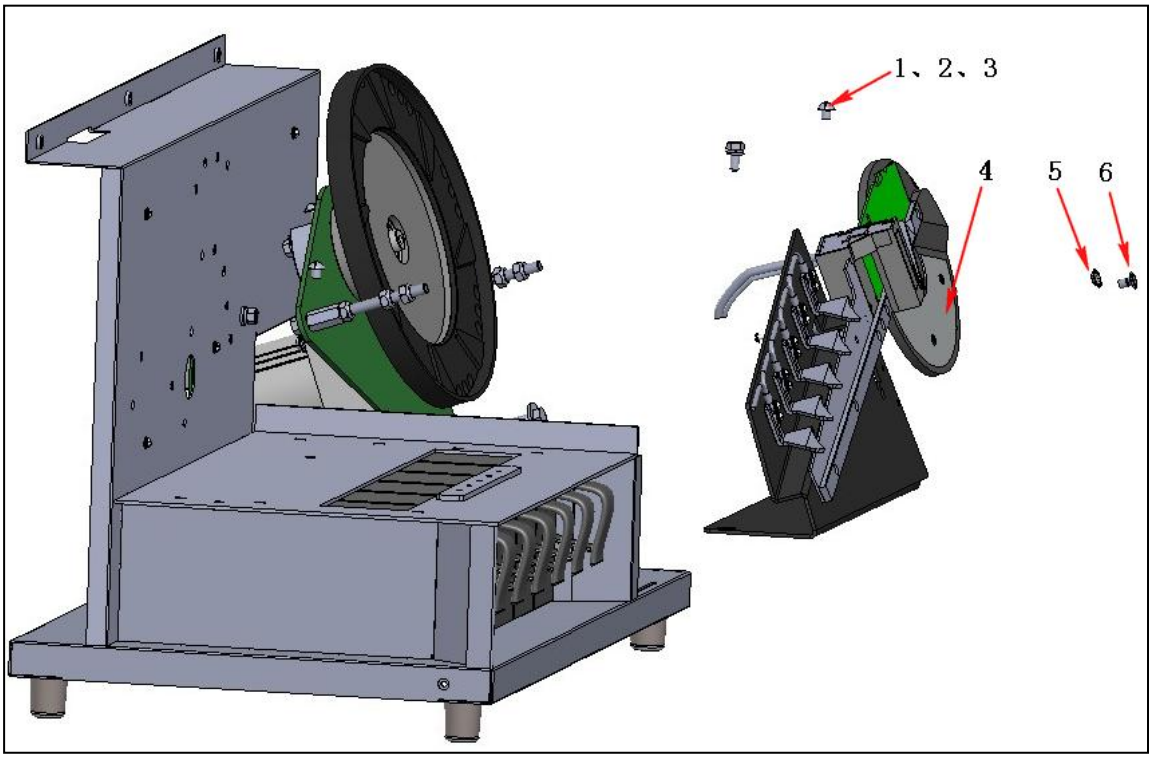
Diagram 5



Part List of Diagram 5

Item	Part No.	Description	Qty.	Remark
1	11021206	Disc base bracket	1	
2	12010306	bolt M4*10	4	
3	11021172	Bracket installation plate	2	
4	11011314	Coupling nut	3	
5	12010609	nut M6	3	
6	12010811	washer ¢6	2	
7	11060306	Spring（CS-600A）	1	
8	11010322	M6X90 Screw	1	
9	12010622	nut M6	6	
10	12020986	Rejected coin blocking plate	1	
11	12013213	composed screw M3*8	3	
12	11030301	Slide plate welding parts	1	

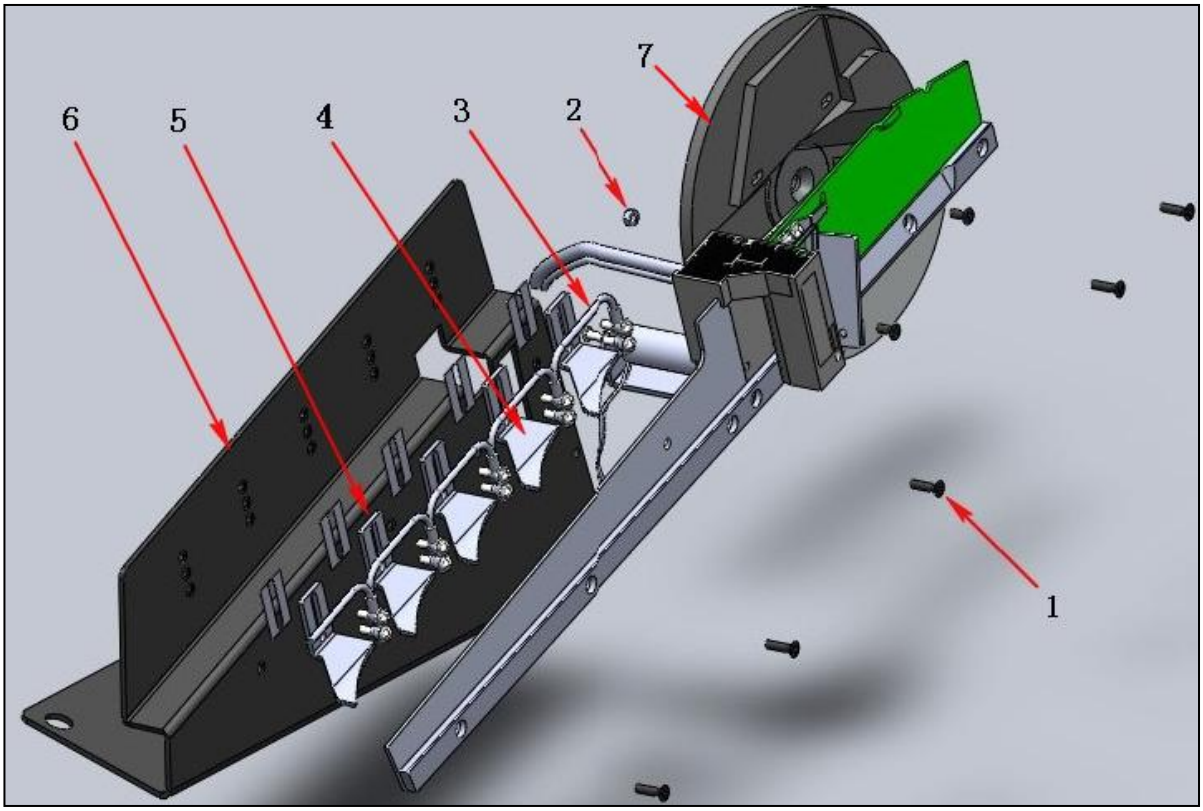
Diagram 6



Part List of Diagram 6

Item	Part No.	Description	Qty.	Remark
1	12010150	bolt M5*10	4	
2	12013704	spring washer ¢5	4	
3	12010806	washer ¢5*18	4	
4	11021023	Grinding plate	1	
5	12010601	nut M3	3	
6	12014205	Bolt M3*6	3	

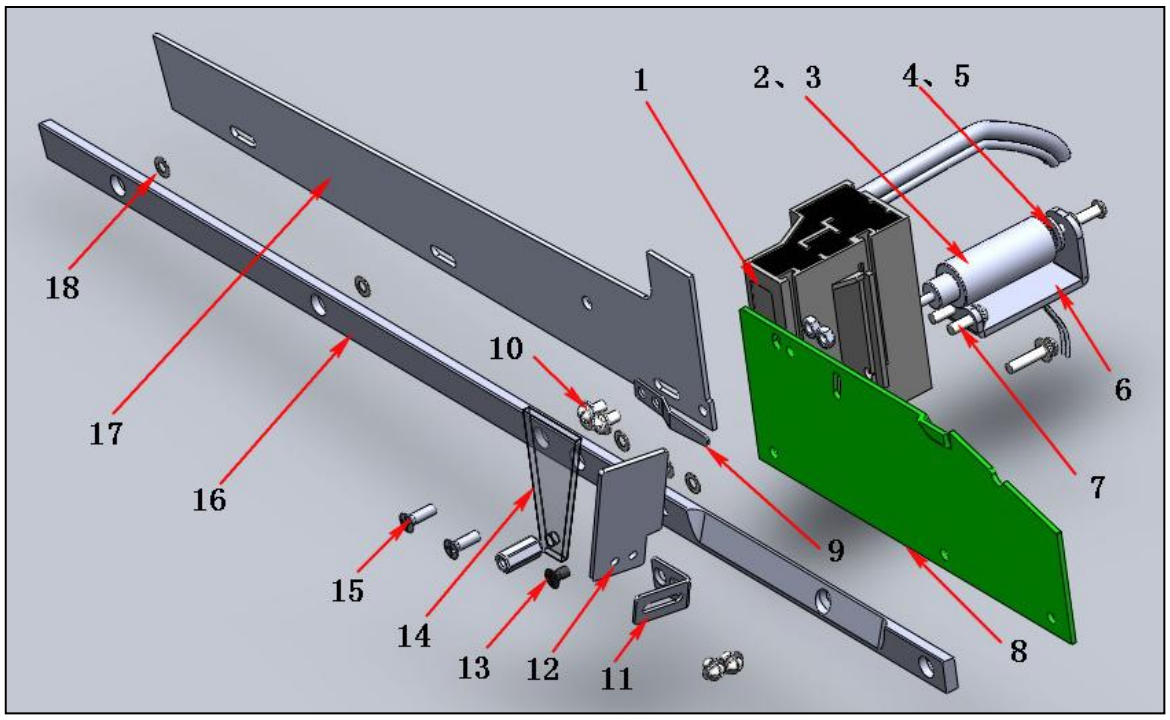
Diagram 7



Part List of Diagram 7

Item	Part No.	Description	Qty.	Remark
1	12010340	bolt M3*10	5	
2	12010601	nut M3	2	
3	41040501	Short-circuit checking cable	1	
4	11021002	Coin outlet plate	5	
5	11021043	Insulation plate	5	
6	11021171	Rail base	1	
7	11073004	Fixing disk	1	

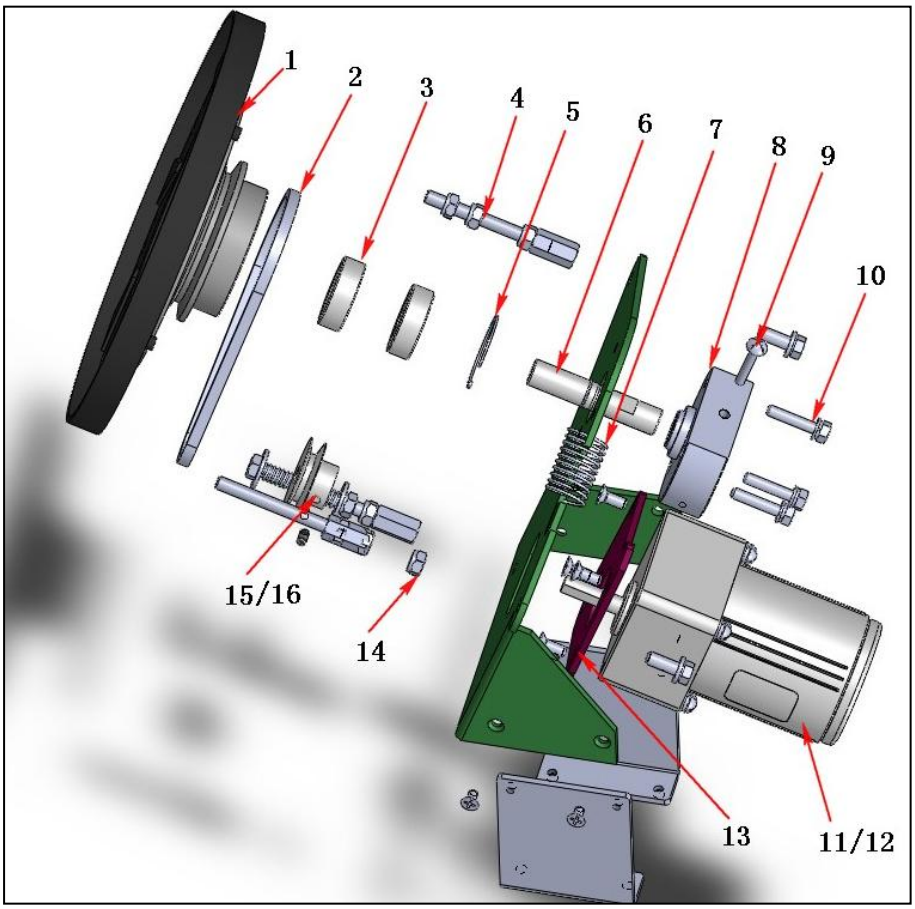
Diagram 8



Part List of Diagram 8

Item	Part No.	Description	Qty.	Remark
1	11081139	Alloy sensor	1	
2	12040055	Electromagnet	1	
3	12020678	Electromagnet connecting wire	1	
4	11060508	Pan head spring	1	
5	12010601	nut M3	1	
6	12020985	Trip adjusting bracket	1	
7	12013204	composed screw M3*10	2	
8	11021164	Right side board	1	
9	12020982	Coin separation plate	1	
10	12013211	composed screw M3*6	2	
11	11024023	Coin limitation plate bracket	1	
12	11024021	Coin limitation plate	1	
13	12010325	bolt M3*4	2	
14	12020978	Leak-proof plate	1	
15	12010340	bolt M3*10	5	
16	11020147	Rail	1	
17	11021174	Left side plate	1	
18	12014223	adjusting washer	5	

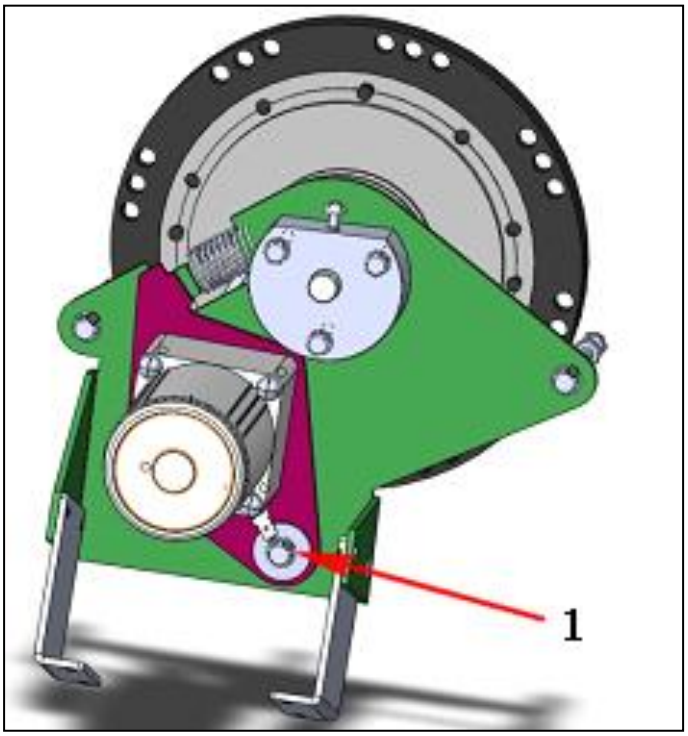
Diagram 9



Part List of Diagram 9

Item	Part No.	Description	Qty.	Remark
1	11073003	Disc	1	
2	12020322	320 Drive belt	1	
3	12020125	Bearing 201(12-32-10)	2	
4	11010323	M6X90 Screw	2	
5	12011002	spring washer ¢32	1	
6	11012005	Shaft	1	
7	11060307	Spring	1	
8	11054003	Disc base bracket	1	
9	12010151	bolt M5*25	1	
10	12010533	Assemble bolt M5*25	3	
11	52010249	Motor (220V)	1	
12	52010250	Motor (110V)	1	
13	11021173	Motor installation plate	1	
14	12010609	nut M6	3	
15	11072236	Motor pulley(220V)	1	
16	11072240	Motor pulley(110V)	1	

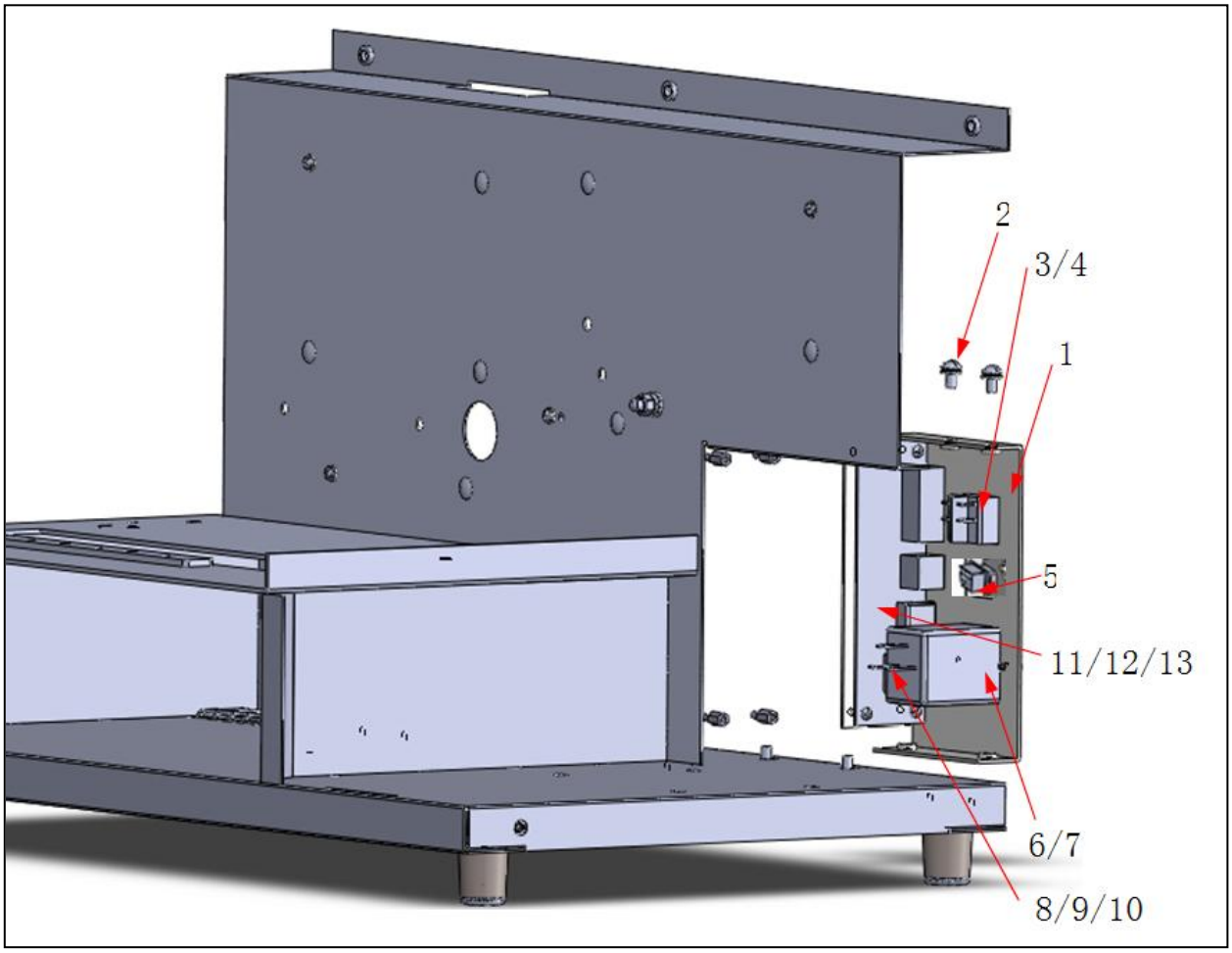
Diagram 10



Part List of Diagram 10

Item	Part No.	Description	Qty.	Remark
1	11010262	Axle housing	1	

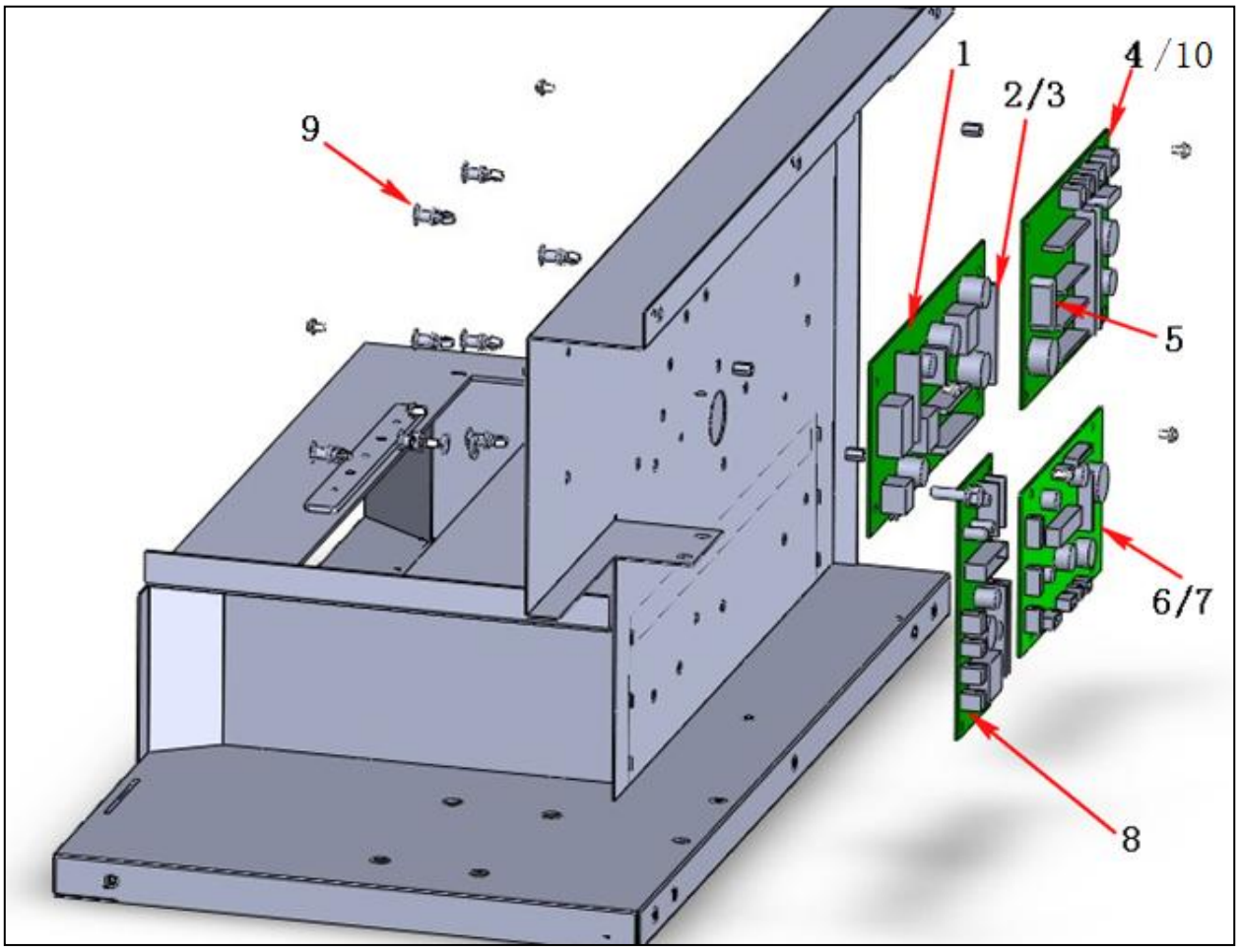
Diagram 11



Part List of Diagram 11

Item	Part No.	Description	Qty.	Remark
1	11021231	Plug board（CS-610S+）	1	
2	12010161	composed bolt M4*8	4	
3	12020570	Switch CS600-A	1	
4	41040505	cable 505	1	
5	41040517	External printer port line（CS-610S+）	1	
6	11080966	Power filter	1	
7	12020601	Fuse 1A	2	
8	41040522	Switch lead wire(black)	1	
9	41040113	CS600A earthing cable 200mm	1	
10	41040523	Switch lead wire(white)	1	
11	41040324	Interface earthing cable （CS-910S+）	1	
12	11081148	Interface board assembly（CS-910S+）	1	
13	41040515	26Pin cable（CS-610S+）	1	

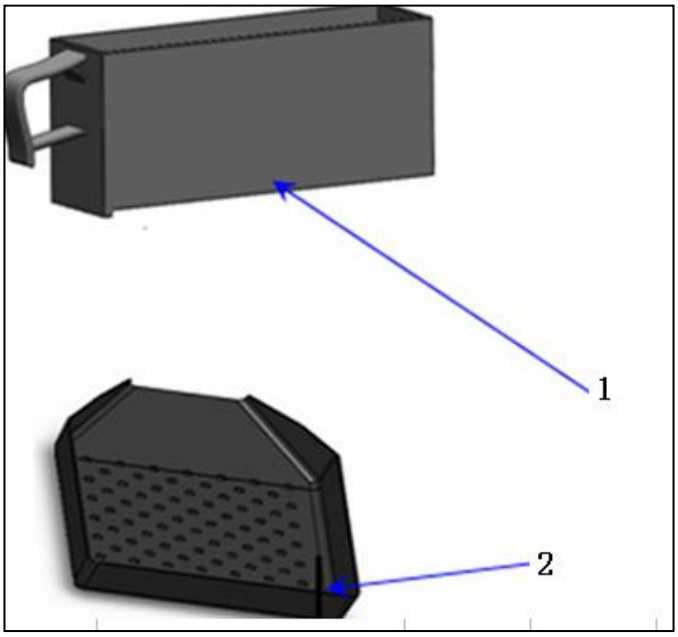
Diagram 12



Part List of Diagram 12

Item	Part No.	Description	Qty.	Remark
1	11080103	Power PCB	1	
2	41040513	200-150mm direct current output cable	1	
3	41040506	170mm 4pin direct current power cable	1	
4	11081154	AD board assembly	1	
5	41040514	34Pin cable（CS-610S+）	1	
6	11081146	Control PCB Assembly （CS-910S+）	1	
7	41040327	7pin cable	1	
8	11081147	Driving board assembly	1	
9	12013814	RCB-8 spacer	12	
10	41040328	6pin cable（CS-910S+）	1	

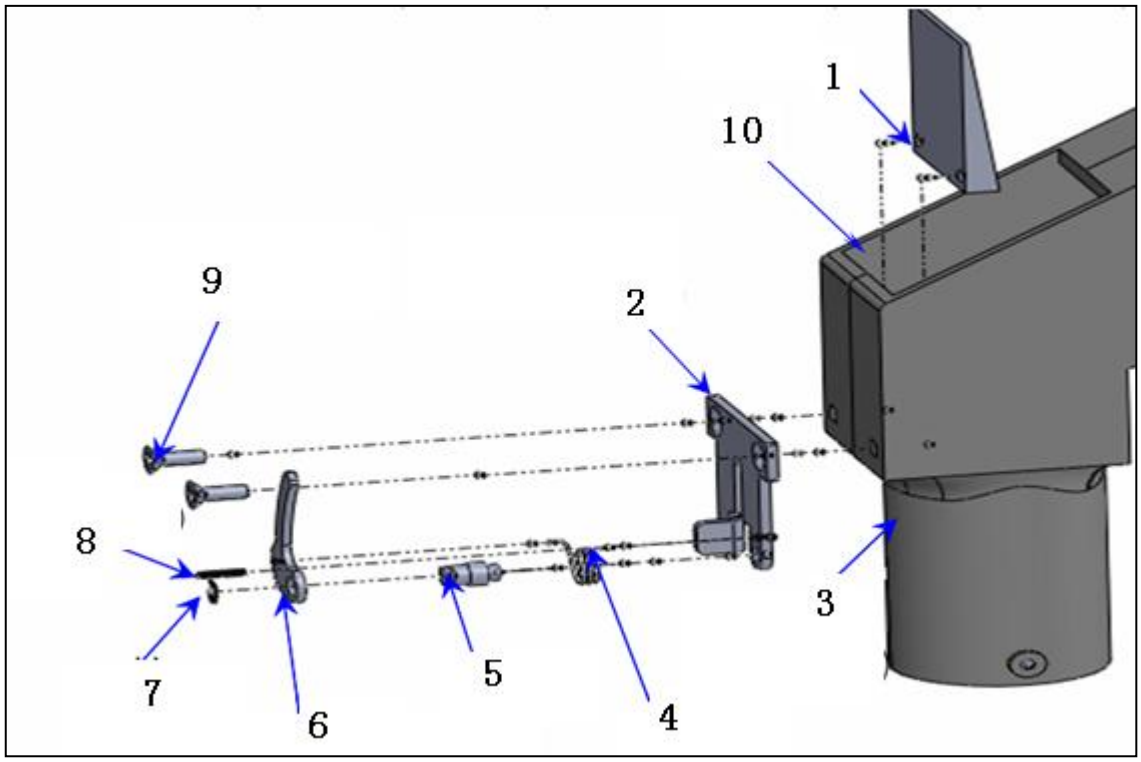
Diagram 13



Part List of Diagram 13

Item	Part No.	Description	Qty.	Remark
1	11073002	Plastic holder	6	
2	11073012	Presorting tray	1	

Diagram 14



Part List of Diagram 14

Item	Part No.	Description	Qty.	Remark
1	11021038	Back block	2	
2	11021036	Coin outlet bag hanger	2	
3	11073009	Coin tube set rubber parts	2	
4	11060807	Torsion spring	2	
5	11012010	Small shaft	2	
6	11021035	Coin outlet bag clip	2	
7	12010903	split washer ¢4	2	
8	12011203	spring pin Φ2*10	2	
9	12010306	bolt M4*10	4	
10	11073010	oin tube set rubber cover	2	

8.Maintenance and Adjustment

8.1 Hopper

Notes: If you put too much coins into the hopper, it will cause the coins jamming between the hopper and the disk, then the disk can not rotate smoothly and the machine can not work normally either. If the distance between the coin outlet plate and side board is too big, then it will cause two coins pass the rail at the same time; if the gap is too tight, then the coins can not pass smoothly

Adjustment method as below

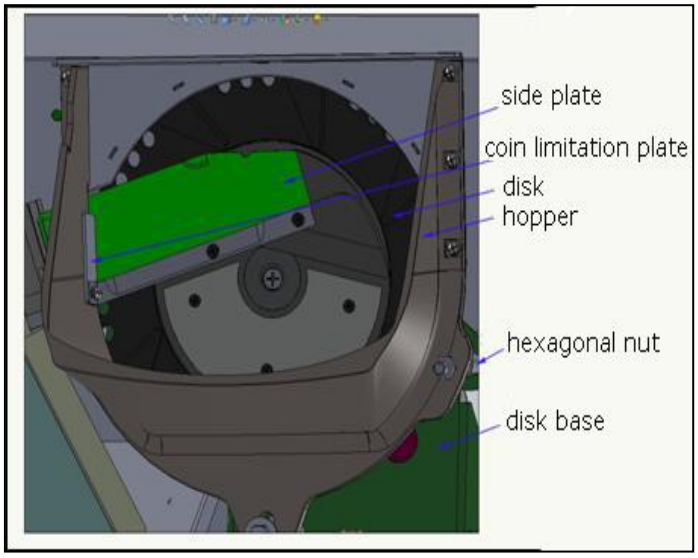


Diagram 8-1

（1）please adjust the hexagonal nut shown in 8-1 to make the spring with some pretightening force. When you move the hopper, the hopper can swing up and down, and the left gap between hopper and disk should be bigger than the right side.

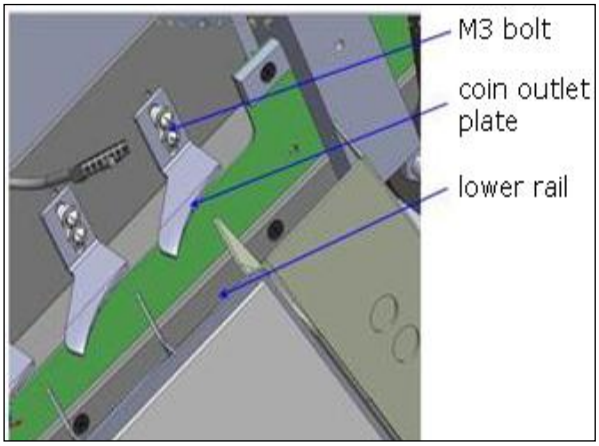
（2）adjust the coin limitation plate

In 8-1, the distance between coin limitation plate and side plate should be 0.4mm thicker than the thickest coins so that the thickest coins can pass through

▪ 8.2 Coin Outlet Plate

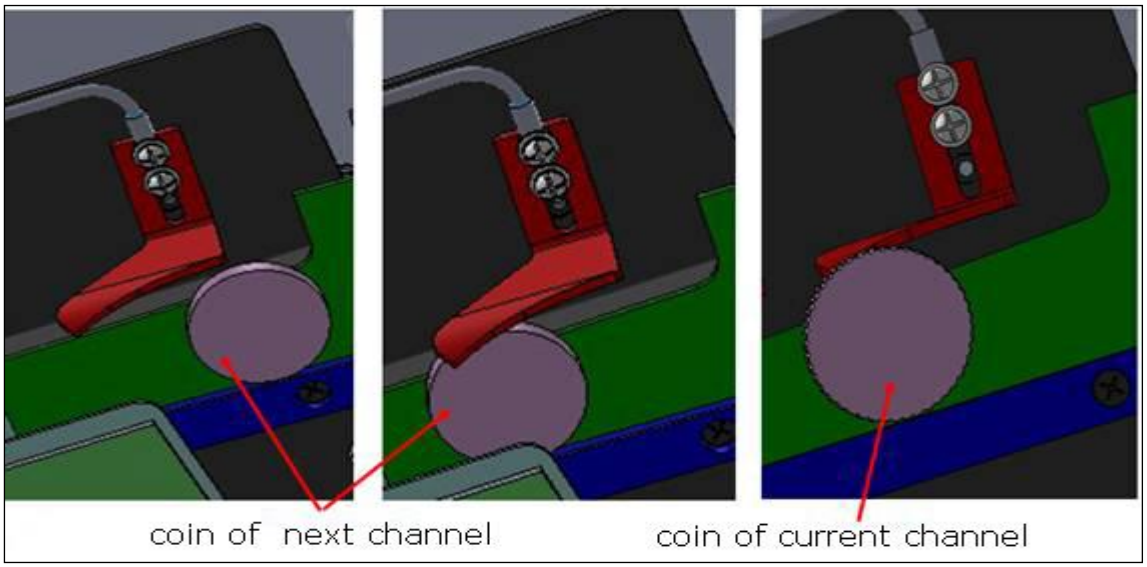
Notes: the height between coin outlet plate and rail is to ensure the correct sorting of different coins, so it is important to adjust it well.

Adjustment method as following



(1) Loose the M3 bolt in picture 8-2 to adjust the height between coin outlet plate and rail. When you adjust the first coin outlet plate(from right to left), you need to use a coin of current channel and next channel. Please use a coin of next channel to stick onto the side plate and bottom rail, adjust the coin outlet plate, to make its vertical distance with next channel's coin is 0.3-05mm,then use the coin of current channel to stick onto the side board, push the coin to the adjusted coin outlet plate, the coin should be at least 0.3mm higher than the bottom of the coin outlet plate and use torsion 5kg/cm to fix the coin outlet plate. You can use the same way to adjust other coin outlet plates.

At last take out the coin with smallest diameter, stick the coin onto the rail, make sure the bottom of the coin outlet plate is 1mm lower than the top of the coin, then tighten the bolt.

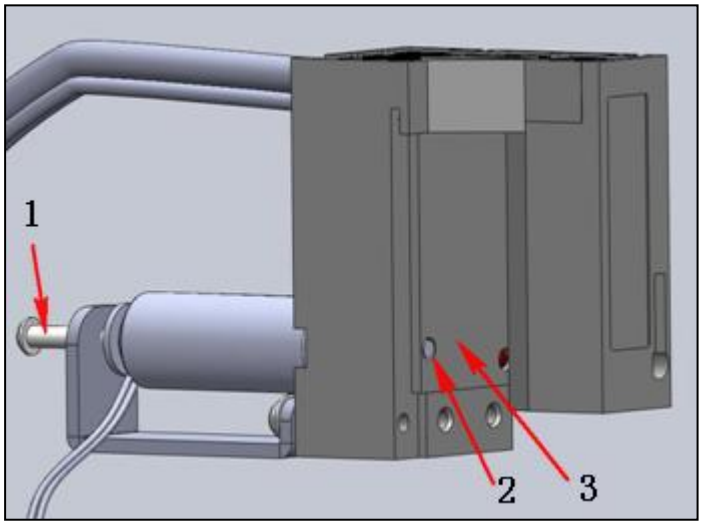


.Picture 8-3

·8.3 Electromagnet

(2) Notes: The Electromagnet is to ensure the foreign coins can be rejected, if this part is not adjusted well, it is possible that the foreign coins can mix with the genuine coins.

Adjustment method as follows:



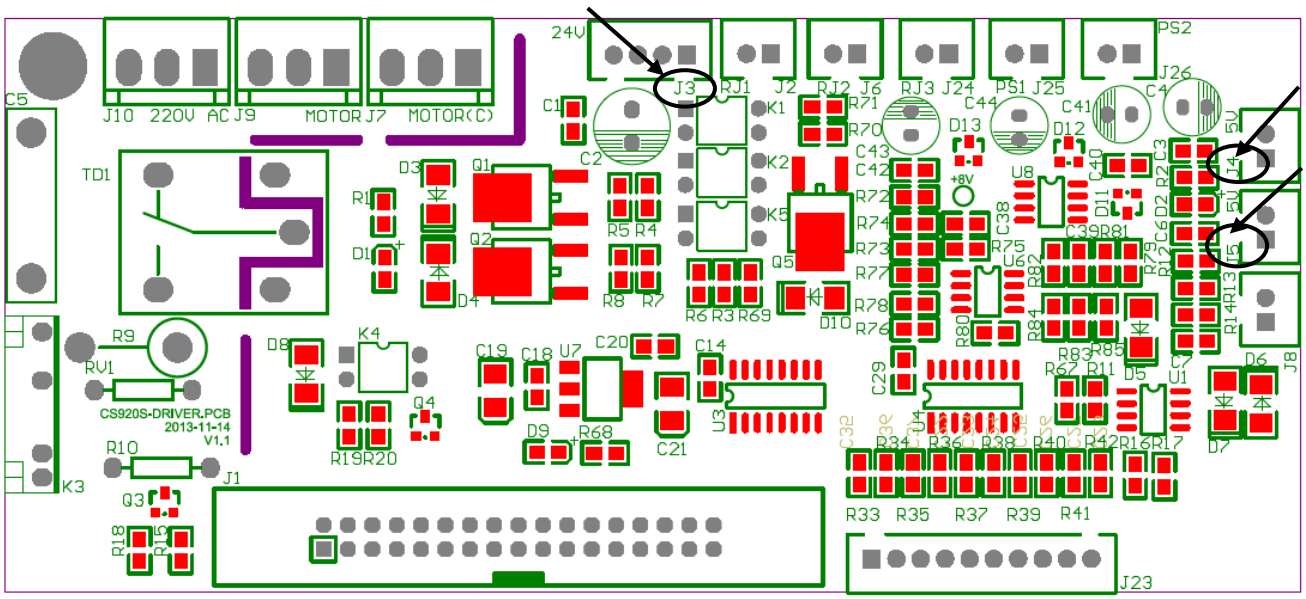
(3) （1）Please refer to 8-4, the solenoid can be adjusted for about 1.5-1.6mm. After you install the Electromagnet assembly, you can loose the nut on bolt 1, adjust the bolt to make the head of thimble No 2 a little lower than the alloy sensor surface NO.3, about 01.-0.2mm

Picture 8-4

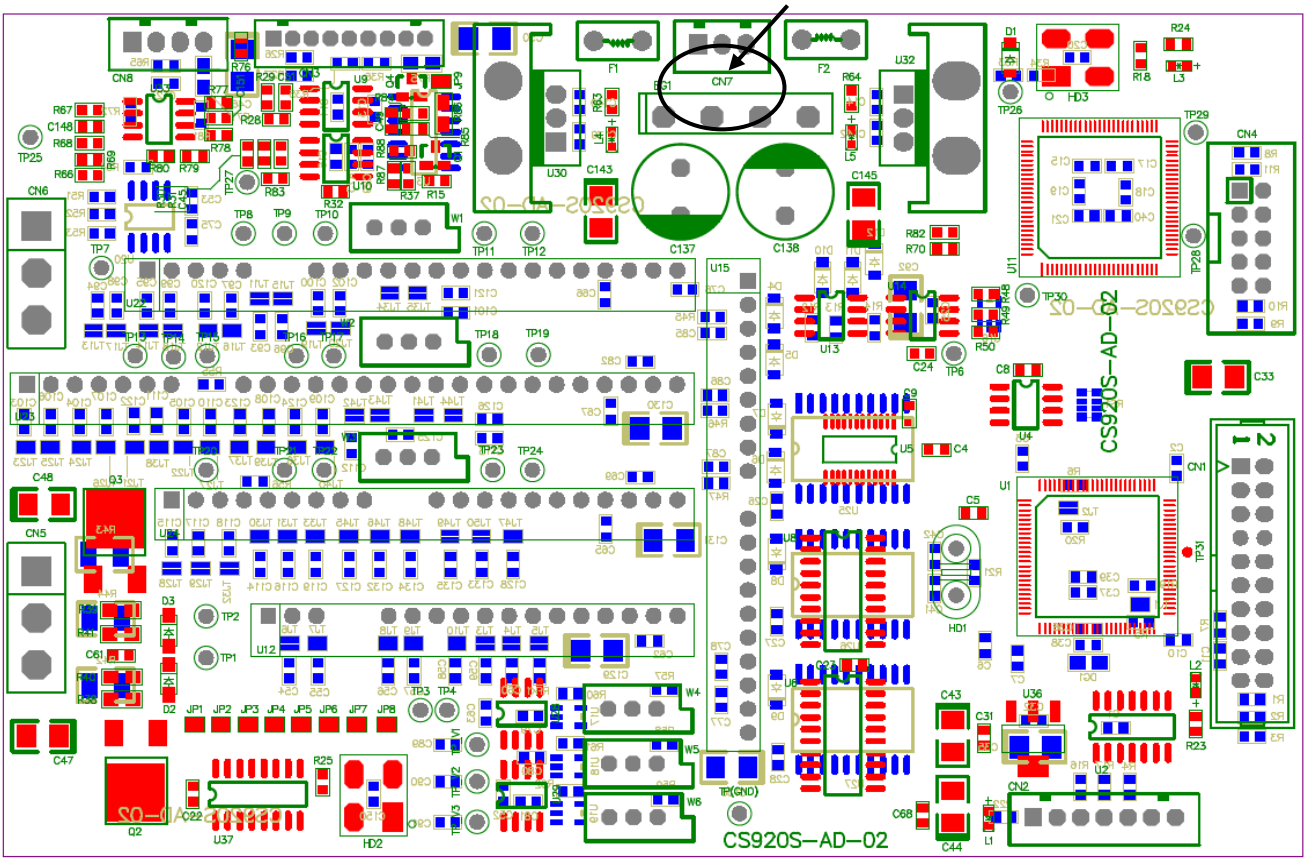
9.Electric equipments checking

9.1 check the power supply

1. On board I&O-V00, the voltage on J3 is +24V, ON J4, J5 is +5V



2. On board AD-V00, the voltage on CN7 is ±12V



10. Trouble shooting

phenomenon	Reason	Solution
When you turn on the power switch, nothing shows on display	·the power plug is not connected well ·the fuse in socket is faulty or welt ·power board is faulty ·the connecting cable of display board is broken .power switch is broken	·reconnect the power plug · replace a new fuse · replace the power board · reconnect or replace the connecting cable .replace the power switch
when you turn on the power switch, the display shows normally, press STOP/STRAT key, the disk does not move	·STOP/START key is faulty ·I/O board is faulty .40PIN cable is loose	· replace the display board · replace the I/O board . reconnect the 40pin cable
when you turn on the machine, the machine only rotates but no reversal	·the relay is broken	·replace the I/O board
when you put coins into hopper, press STOP/START key, the disk rotates but no coins come out or not smoothly.	· the fixing disk is higher than the disk surface	· Adjust the fixing disk and make it a little lower than the disk
Jamming	· please check if there is some foreign items mixed with coins; · Some coins are destroyed or distorted	. remove the foreign items ·Take out the destroyed or distorted coins
the coin stuck at the passage of the rail	· The coin outlet plate position is not proper	·refer to 8-8.2 in service manual
no response of the key panel	·40 pin cable is not connected ·key panel is broken	·reconnect · replace the key panel
no action of the Electromagnet	· the power board is faulty ·the Electromagnet is faulty ·the driving circuit of Electromagnet is faulty	· replace the power board ·replace the electromagnet · replace the I/O board
the reject power of electromagnet is too small	·the electromagnet is not adjusted well ·the electromagnet is aging	·re-adjust the electromagnet ·replace the electromagnet
lots of genuine coins are rejected into rejected pocket	·the alloy sensor and transistor are covered with dust · the parameter has diverted	· clean the rail and the IR transistor ·do self-learning
Display show ERROR		·refer to part 4 in

display is blank (blue screen)	. main board is faulty . AD board is faulty .34pin cable is faulty . Display CPU is faulty 7pin cable is faulty	.replace the main board .replace the AD board .replace the 34pin cable .replace the display assembly . replace yje 7 pin cable
the display turn blue during software upgrading	. 26pin cable is faulty . interface board is faulty . USB stick is faulty . the display CPU is faulty . the 7pin cable is faulty	. replace the 26pin cable . replace the interface board . replace the USB sticker . replace the display CPU . replace the 7pin cable
motor does not reserves	.I/O board is faulty .34pin cable is faulty .main board is faulty .4pin cable is loose or faulty	. replace the I/O board . replace the 34pin cable . replace the main board . reconnect or replace the cable
key panel has no response / display shows ADJUST after machine turned on	. the TEST value on AD board is diverting	. replace the AD board or adjust the AD parameter
The printer has no response	printer function is not turned on in system · power cable or serial cable is not connected well · printer is faulty	check the system setting ·open the back cover and reconnect the cable · replace the printer

11、 Recommended spare parts list

No.	Part No	Description	Qty	Remark
1	11081138	Key panel	1	
2	11080103	Power board	1	
3	11080966	power filter	1	
4	12020322	320 Drive belt	1	
5	11081134	KDC-V00 key panel assembly	1	
6	11081135	CPU-V00 main board assembly	1	
7	11081136	I/O extending board assembly	1	
8	11081137	AD board assembly	1	
9	12040055	Electromagnet	1	